



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Yusuke NAKAZAWA et, al. : Group Art Unit 2854
Appn. No.: 09/396,238 : Examiner: FUNK, STEPHEN R.
Filed: September 15, 1999 :

For: METHOD OF LITHOGRAPHIC PRINTING

DECLARATION UNDER 37 C.F.R. §1.132

Assistant Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

I, Yusuke Nakazawa, do declare and state as follows:

I am a citizen of Japan.

I graduated from Tokyo Institute of Technology and received a Doctor of Philosophy in the course of Science and Engineering in March 1992.

Since April 1992 I have been employed by Fuji Photo Film Co., Ltd. and have been engaged in research and development of an transfer-type electrophotographic plate-making system and an electrostatic inkjet at the Yoshida-Minami Factory Research Division of said company.

I am a co-inventor of the invention described and claimed in the above-named application, and I am familiar with the subject matter disclosed by said application as well as the Office Action dated May 25, 2004 concerning said application.

EXPERIMENTATION

A plate-making was performed according to each of the following processes by using the printing plate requiring no processing describing in Example 1 of Japanese Laid-Open No. 2000-233580 as a printing plate precursor, and then the obtained plate is set up on automatic printing machine (AM-2850, manufactured by AM Co. Ltd.) to carry out a printing, wherein as a fountain solution, a solution of processing agent for PS plate (EU-3, manufactured by Fuji Photo Film Co, Ltd.) diluted by 50 times with distilled water, and black ink for off-set printing, were used.

- 1) Experimental example of Kato: Example 1 of Kato was replicated.
- 2) Experimental example of Jones: A imaging was performed in the same manner as in Example 2, and then a heating and fixing was performed by a heat roller (silicon rubber roller covered with PFA having a thickness of 0.05 mm; surface temperature: 160°C; nip pressure: 0.55 MPa; speed: 5mm/sec).
- 3) Experimental example of the present invention: A imaging was performed in the same manner as in Example 3 of the present specification (the head shown in Fig. 7 was used), and then a heating and fixing was performed by a heat roller (silicon rubber roller covered with PFA having a thickness of 0.05 mm; surface temperature: 160°C; nip pressure: 0.55 MPa; speed: 5mm/sec).

A printing press was estimated with regard to the above mentioned examples, and the results are set forth in the following table.

Data of the Experiments

Ink	Fixing Method	Image Quality	Printing Press (shown in each Example)	Notes
Aqueous Ink	Heat roller fixing	Poor: dots of about 2 pl. droplet	500 sheets or less	Invention set forth in Jones
Oily Ink	Fuser fixing	High: dots of about 0.1 pl. droplet	3,000 sheets	Invention set forth in Kato
	Heat roller fixing		10,000 sheets or more	The present invention

As seen in the above table, the printing press obtained by tracing the Kato's method was 3,000 sheets, while that of the present invention was 10,000 sheets or more.

In addition to the fact that, according to the present invention (electrostatic inkjet method combined with oily ink), extremely fine ink droplets can be formed to give a high image quality (as set forth in page 7 of the specification), high printing press can be attained, as an unpredictable and preferable effect, when the image drawn on a printing plate with an oily ink is fixed by a heat roller.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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Respectively submitted,

Date: 08/24/00

Yusuke Nakazawa

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